	Application No.	**Applicant(s)**
Notice of Allowability	10/719,371	LIONG ET AL.
	Examiner	**Art Unit**	
	Kristie D. Shingles	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _10/30/2007_.

2. ☒ The allowed claim(s) is/are _1,3-11,13-19 and 21-26_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

      a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

          1. ☐ Certified copies of the priority documents have been received.

          2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

          3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

      * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _2/1/08_ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

kds/20080201

DETAILED ACTION

Per Applicant's Request for Continued Examination
Claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 18, 21, 25 and 27 are amended.
Claims 1-27 are pending.

Per Examiner's Amendment
Claims 1, 3, 4, 7, 11, 13, 14, 21, 25 and 26 are amended.
Claims 2, 12, 20 and 27 are cancelled.

<u>Claims 1, 3-11, 13-19 and 21-26 are allowed</u>.

Continued Examination Under 37 CFR 1.114

I.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

10/30/2007 has been entered.

Response to Arguments

II.   Applicant's arguments (see Remarks pages 9-18 filed 10/30/2007) with respect to

claims 1, 5, 11, 14 and 21 have been fully considered and are persuasive. The rejections

of the pending claims have therefore been withdrawn.

Examiner's Amendment

III. An Examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided by

37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

IV. Authorization for this Examiner's amendment was given in a telephone

interview with Atty. Sejoon Ahn on February 1, 2008. Please make the following

changes:

> **Claim 1 (amended):** A system comprising:
>
> a policy server <u>device</u> that is arranged to
>
>> configure a customer policy comprising a tunnel mode <u>and a tunnel group
>> identifier,</u>
>>
>> configure a mapping policy that maps between an experimental field and a
>> unique per-hop-behavior, and
>>
>> send the mapping policy and the customer policy to interfaces of devices of a
>> network that includes multi-protocol label switching tunnels,
>> corresponding to the tunnels, at least one of the network devices
>> comprising an egress interface of one of said multi-protocol label
>> switching tunnels, wherein the interfaces and the customer policy are
>> associated with a same role name.
>
> **Cancel Claim 2.**
>
> **Claim 3 (amended):** The system of claim 1, wherein the policy server <u>device</u> translates
> the mapping policy into device specific commands, and ~~deployment~~ <u>sending</u> is performed
> by deploying commands to specific devices.
>
> **Claim 4 (amended):** The system of claim 1, wherein ~~deployment~~ <u>sending</u> is such that the
> interfaces associate with at least one of input roles, output roles and multi-protocol label
> switching gateways of customer source and destination host groups.

Claim 7 (amended): The apparatus of claim 5, wherein ~~deployment~~ sending is such that the interfaces associate with at least one of input roles, output roles and multi-protocol label switching gateways of customer source and destination host groups.

Claim 11(amended): An apparatus comprising a processor with:

~~a~~ defining means for defining a mapping policy that maps between an experimental field and a unique per-hop-behavior;

~~a~~ maintaining means for maintaining a customer policy, the customer policy comprising a tunneling mode and a tunnel group identifier;

~~a~~ translating means for translating the mapping policy, the network policy and customer policy into device-specific commands; and

~~a~~ sending means for sending the device-specific commands to policy targets, wherein each policy target comprises a network device that includes an interface that is associated with a role name that is also associated with the customer policy, said interfaces including an egress interface of at least one of multi-protocol label switching tunnels.

Cancel Claim 12.

Claim 13 (amended): The apparatus of claim 11, wherein ~~deployment~~ sending is such that the interfaces associate with at least one of input roles, output roles and multi-protocol label switching gateways of customer source and destination host groups.

Claim 14 (amended): An article comprising: a storage medium, the storage medium having instructions stored thereon, wherein when the instructions are executed by at least one device, they result in:

defining a mapping policy that maps between an experimental field and a unique per-hop-behavior;

defining a customer policy comprising a tunneling mode and a tunnel group identifier, the customer policy being configured to govern the treatment o f individual customer traffic;

defining a network policy that is configured to define the Diffserv treatment of aggregated traffic;

translating the mapping policy, the network policy and the customer policy into device-specific commands; and

deploying the device-specific commands to policy targets, wherein each policy target comprises a network device that includes an interface that is assigned a role name associated with the customer policy, at least one interface comprising an egress interface of at least one multi-protocol label switching tunnel.

Cancel Claim 20.

Claim 21 (amended): A method comprising:

defining a mapping policy configured to map between an experimental field and a unique per-hop-behavior;

defining a customer policy comprising a tunneling mode and a tunnel group identifier, the customer policy being configured to govern the treatment of individual customer traffic;

defining a network policy that is configured to define the Diffserv treatment of aggregated traffic;

translating the mapping policy, the network policy and the customer policy into device-specific commands; and

sending the device-specific commands to policy targets, wherein each policy target comprises a network device that includes an interface assigned a role name associated with the customer policy, at least one of the interfaces comprising an egress interface of one of multi-protocol label switching tunnels.

Claim 25 (amended): The method of claim 21, wherein ~~deployment~~ sending is such that the interfaces associate with at least one of input roles, output roles and multi-protocol label switching gateways of customer source and destination host groups.

Claim 26 (amended): The method of claim 21, wherein ~~deploying~~ sending the mapping policy to the network interfaces further comprises issuing new commands to reconfigure a router based on the mapping policy.

Cancel Claim 27.

Reasons for Allowance
(The following is an examiner's statement of reasons for allowance)

V.   The prior art or record fails to teach neither singly nor in combination, the claimed limitations of "a policy server device that is arranged to configure a customer policy comprising a tunnel mode and a tunnel group identifier" as stated in independent Claims 1, 5, 11, 14 and 21 (see Applicant's Specification, page 4).

VI.   Specifically, the feature of configuring a customer policy comprising a tunnel mode and a tunnel group identifier is not expressly taught or suggested by the prior art, wherein Applicant's disclosure defines the tunnel mode as a method of "translating DiffServ information in the multi-protocol label switching header into DSCP values" having two modes: uniform or pipe mode (see Applicant's Specification, page 4). Applicant's hardware embodiment of a policy server device having this functionality is not disclosed by the prior art.

VII.   As discussed in Applicant's Remarks filed 10/30/2007, these limitations, in conjunction with other limitations in the independent and dependent claims, are not specifically disclosed or remotely suggested in the prior art of record. A review of Claims 1, 3-11, 13-19 and 21-26 in view of the Examiner's remarks above, indicates that Claims 1, 3-11, 13-19 and 21-26 are allowable over the prior art of record.

        Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

VIII. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The Examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie D. Shingles
Examiner
Art Unit 2141

kds